

REMARKS

Applicants invention is defined by two independent claims 1 and 4 for an improved sound pressure level calibrator and method. The present invention is designed to provide accurate calibrations immediately before starting a measuring process for an entire measuring operation even at high pressure sound level. The present invention provide calibration of different sound pressure levels through adaptation modules.

Claims 1-5 are now rejected under 35 U.S.C. 103 as unpatentable over Takashi et al. (English language abstract of Japanese Patent JP 405049097) in view of Barham.

According to the statement of the rejection the reference to Takashi et al. discloses a sound pressure device for measuring and calibrating microphone characteristics having a pistonphone with piston 11 and a volume adjustable by relative movement of members 1 and 2 to produce a varying sound pressure. The rejection then indicates that the cylindrical chamber 3 is a $\lambda/4$ resonator. The rejection makes reference to paragraphs [0010] of Applicants specification for indication that it is a tube with a constant diameter closed at one end and opened at the other end.

Additionally, the rejection indicates that the "adapted to" is now positive limitation referring to *In re Hutchinson*, 69 USPQ 138.

The secondary reference to Barham has been cited for teaching a calibration that may be used over a wide range so that it meets the requirements of the claims 1 and 4 with respect to a "selected excitation frequency".

Applicants respectfully traverse this rejection on the grounds that independent claims 1 and 4 provide structure and method limitations not available from the references even if the references are combined in the manner indicated in the rejection.

The reference to Takashi et al. '097 has a pistonphone formed of a piston 11 and a pressure chamber 3 with adjustable volume formed by members 1 and 2. Therefore, the first element of claims 1 and 2 is met by Takashi et al. That is, the first element of claims 1 and 4 is a pistonphone having a piston and an adjustable pistonphone volume. However, independent claims 1 and 4 each recite, in addition to the pistonphone, a high-pressure adaptor connected to the output of the pistonphone volume and defines that adaptor as a tube formed as a $\lambda / 4$ resonator having a length which is adapted to the excitation frequency of the pistonphone to amplify the sound pressure produced in the pistonphone volume as well as an expanded adaptor opening with a sealing ring for a sound proof connection to the sound pressure level sensor to be calibrated.

In addition to a pistonphone, the reference to Takashi et al. includes a microphone mount 12 so that the microphone is mounted to the casing in order to face the pressure chamber with the air tight member 15. Therefore, the

reference to Takashi et al. has a teaching of directly connecting the microphone to be calibrated to the volume of the pressure chamber (pistonphone volume).

Applicants respectfully submit that Takashi et al. does not have a high-pressure adapter connected to an output of the pistonphone volume which includes a tube formed as $\lambda / 4$ resonator with a length which is adapted to the excitation frequency of the pistonphone to amplify the sound pressure produced in the pistonphone volume. Additionally, Takashi et al. has no showing that the amplifier adapter has an expanded opening for a soundproof connection to the microphone to be calibrated. As indicated above, the microphone is directly connected to the pressure chamber 3 in Takashi et al.

According to the rejection, the chamber 3 of Takashi et al. is a high pressure adapter. This is impossible because the chamber 3 is required to form the pistonphone so that it cannot be both the pistonphone volume and the adapter connected to the pistonphone. The pistonphone is claimed as having an adjustable volume and a piston and the high pressure adapter is claimed as being connected to an output of the volume. There is no such showing in Takashi et al.

Thus, if chamber 3 is an adapter in Takashi et al. then there is no pistonphone volume and, if chamber 3 is the pistonphone volume, there is no adapter. Yet independent claims 1 and 4 specifically require both elements.

Additionally, Applicants submit that the Examiner's indication concerning the failure to recite a positive limitation due to the term "adapted to" is submitted as being erroneously. *In re Hutchison*, 69 USPQ 138 stands for the proposition, among other things, that a statement in a "introductory clause" is not a limitation in the patentably sense. The present invention does not have "adapted to" in the introductory clause i.e. it is not in the preamble. It is the preamble to which Hutchinson is specifically addressed. A copy of the first page of Hutchinson is included with attention being drawn to head note 4.

Therefore, the limitations following "adapted to" cannot be ignored. The limitations concerning "adapted to" does provide a positive limitation on an element.

The reference Barham, even accepting the statement of the rejection of the showing for Barham, adds nothing toward meaning the claim limitations of independent claims 1 and 4 which are absent from the primary reference to Takashi et al.

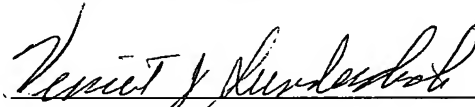
Therefore, in view of the distinguishing features between the claimed invention and the references which features are not shown or disclosed or made obvious by the references or their combination, Applicants respectfully request that this application containing claims 1-5 including independent claims 1 and 4 be allowed and be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #05622650943).

February 10, 2004

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Vincent J. Sunderdick", is written over a horizontal line.

Vincent J. Sunderdick
Registration No. 29,004

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844

VJS:adb
Document#303118



In re HUTCHISON

(CCPA)
69 USPQ 138

Decided Mar. 6, 1946

Appl. No. 5123

U.S. Court of Customs and Patent Appeals

Headnotes

PATENTS

1. Pleading and practice in Patent Office

Case under dual prosecution practice has statements of two examiners although references cited by both were same and all appealed claims might have been considered in same division.

2. Appeals to Court of Customs and Patent Appeals--Issues to be determined--Ex parte patent cases

Court is not concerned with allowed claims in instant division or its parent patent; rejected claims are not compared with allowed claims in division or with patent claims.

3. Construction of specification and claims--Broad or narrow

Functional statements therein do not limit article claims.

4. Construction of specification and claims--Introductory phrase

Statement in introductory clause that article is "adapted" for specific use is not limitation in patentable sense.

Particular patents--Templates

Hutchison, Fabrication of Templates or the Like, claims 42, 43, 54, 56, 57, and 58 of application refused.